EXHIBIT U

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner

v.

COREPHOTONICS LTD.,
Patent Owner

Case IPR2018-00030
U.S. Patent No. 9,857,568

DECLARATION OF DUNCAN MOORE, Ph.D.
PURSUANT TO 37 C.F.R. §1.68

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B. Claims 1–5 of the '032 Patent are Not Rendered Obvious by Ogino in Combination with Beich 55

Space Telescope Independent Optical Review Panel for NASA from 1990 to 1991. This committee determined the correct prescription to repair the Hubble Telescope. I am currently the Chairman of the Product Integrity Team verifying the optics for the future replacement for the Hubble, the James Webb Telescope – which, unlike the Hubble, will not be serviceable.

10. I have been awarded numerous honors over the course of my career including Election to the National Academy of Engineering (membership comprising 0.1% of all engineers in the U.S.), Engineer of the Year by Rochester Engineering Society, National Engineering Award from the American Association of Engineering Societies, Optical Society of America Leadership Award, the International Society for Optical Engineering (SPIE) Gold Medal, and the Edwin Land Medal of the Society for Imaging Science and Technology and the Optical Society of America (OSA).

11. I have authored or co-authored almost 90 publications in the field of optics, and I was an editor of several books on Optics. I have given over 150 presentations on optics. I am an inventor of 17 U.S. patents related to optics.

IV. Level of Ordinary Skill in the Art (POSITA)

12. I understand that in evaluating the validity of the '568 patent claims, the content of a patent or printed publication prior art should be interpreted the way

a person of ordinary skill in the art would have interpreted the prior art as of the effective filing date of these challenged patents.

13. I understand that factors that may be considered in determining the level of ordinary skill in the art at the time of the effective filing date of the challenged patents include: (1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of active workers in the field.

14. In my opinion, a person of ordinary skill in the art (POSITA) of the '568 patent, at the time of the effective filing date, would have possessed an undergraduate degree in optical engineering, electrical engineering, or physics, with the equivalent of three years of experience in optical design.

15. I understand that the '568 patent is a continuation-in-part of U.S. App. No. 15/170,472, now the '721 patent, which is a continuation of application U.S. App. No. 14/932,319, now the '032 patent, which has the benefit of priority to U.S. Provisional App. No. 61/842,987, filed on July 4, 2013. *See* Ex. 1001, at 1. I understand that the effective filing date of the '568 patent is July 4, 2013. I note that Dr. Sasián appears to have applied this date in his analysis of the level of ordinary skill as well. Ex. 1003, ¶ 19.

16. I understand that Dr. Saisian states that a POSITA for the '568 patent would have "approximately three years of experience ***in designing and/or manufacturing*** multi-lens optical systems." Ex. 1003, ¶ 19 (emphasis added). However, in IPR2018-01140, in which Apple is currently challenging claims of the '032 patent, based upon the same Ogino prior art patent, Dr. Saisian stated that a POSITA would have "approximately three years of experience ***in designing*** multi-lens optical systems." Ex. 2013, ¶ 19 (emphasis added).

17. I understand that the '032 patent and '568 patent are related by continuation-in-part and share largely identical specifications. However, Dr. Sasián states only in the '568 patent IPR proceeding that a POSITA would have experience "manufacturing" multi-lens optical systems.

18. I understand also that, in his July 2, 2019 deposition, Dr. Sasián confirmed that a person with lens design experience, but no lens manufacturing experience, can meet the requirements to be a POSITA for the '568 patent. Ex. 2012, 20:12-22.

19. I do not agree with Dr. Sasián that the definition of a POSITA for the '568 patent requires manufacturing experience. The work of a lens *designer* does not typically overlap with that of a lens *manufacturer*, except in the way that the design and production stages of any given product would typically overlap. I also note that the Beich prior art reference, which Dr. Sasián contends may be combined

with Ogino, notes the disjoint between engineering teams (that design lenses) and the manufacturers of the lenses. *See* Ex. 1020, at 2, 10.

20. A POSITA for the '568 patent, for which Apple and Corephotonics both agree would have the equivalent of three years of lens *design* experience, would have been unlikely to have specialized knowledge specific to the *manufacture* of lenses, which constitutes a separate field entirely. Dr. Sasián confirmed this view at his July 2, 2019 deposition, where he stated that: (1) he could not recall any course taught by the college of optical sciences where "students obtain experience with injection molding plastic lenses"; (2) could not remember any student, in his 40 years of teaching, who had "experience [with] injection molding plastic lenses prior to the time they graduate[d];" and that (3) the last time he visited a factory where plastic lenses were being injection molded was in 2006. Ex. 2012, at 25:11-15, 26:2-27:11. I also note that Dr. Sasián could not confirm there was a "injection molding machine" at his University." *Id.* at 26:2-7.

V. Relevant Legal Standards for Anticipation and Obviousness

21. I have been informed of the legal standards for establishing patent invalidity in *inter partes* review proceedings before the Patent Trial and Appeal Board.